

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Monty Krieger

Serial No.: Continuation of 09/148,012

Art Unit: Not Yet Assigned

Filed: November 12, 2003

Examiner: Not Yet Assigned

For: *SR-BI ANTAGONISTS AND USE THEREOF AS CONTRACEPTIVES AND IN THE
TREATMENT OF STEROIDAL OVERPRODUCTION*

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §1.56 and 37 C.F.R. §1.97, Applicant submits an Information Disclosure Statement, including twelve (12) pages of Form PTO-1449. All of the documents cited below were cited by or submitted to the Patent Office in Application Serial No. 09/148,012 filed September 4, 1998, to which the present application claims priority. Pursuant to 37 C.F.R. §1.98(d), Applicant is not enclosing copies of these publications. Copies will be provided upon request, however.

This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97(b) prior to a first Office Action on the merits. It is believed that no fee is required with this submission. However, should a fee be required, the Commissioner is hereby authorized to charge any required fees to Deposit Account No. 50-1868.

U.S. Patents

| <u>Number</u> | <u>Issue Date</u> | <u>Patentee</u> | <u>Class/Subclass</u> |
|---------------|-------------------|--------------------|-----------------------|
| 3,625,214 | 12-07-1971 | Higuchi | 128/260 |
| 4,244,946 | 01-13-1981 | River, et al. | 424/177 |
| 4,305,872 | 12-15-1981 | Johnston, et al. | 260/112.5 |
| 4,316,891 | 12-23-1982 | Guillemin, et al. | 424/177 |
| 4,629,784 | 12-16-1986 | Stammer | 530/328 |
| 4,789,734 | 12-06-1988 | Pierschbacher | 530/395 |
| 4,792,525 | 12-20-1988 | Ruoslaghti, et al. | 435/240 |
| 4,868,116 | 09-19-1989 | Morgan, et al. | 436/240.2 |
| 4,906,474 | 03-06-1990 | Langer, et al. | 424/428 |
| 4,925,673 | 05-15-1990 | Steiner, et al. | 424/458 |
| 4,980,286 | 12-25-1990 | Morgan, et al. | 435/172.3 |
| 5,674,488 | 10-07-1997 | Reich | 424/94.4 |
| 5,962,322 | 10-05-1999 | Kozarsky, et al. | 435/375 |

Foreign Documents

| <u>Number</u> | <u>Publication Date</u> | <u>Patentee</u> | <u>Country</u> |
|---------------|-------------------------|-------------------------------------|----------------|
| WO 93/01286 | 01-21-1993 | Massachusetts Inst of Technology | PCT |
| WO 96/00288 | 01-04-1996 | Rigotti, et al. | PCT |
| WO 97/18304 | 05-22-1997 | Massachusetts Inst of Technology | PCT |

Publications

ABUMRAD, et al., "Cloning of a Rat Adipocyte Membrane Protein Implicated in Binding or Transport of Long-chain Fatty Acids That Is Induced during Preadipocyte Differentiation," *J. Biol. Chem.* 268:17665-17668 (1993).

ACTON, et al., "Expression Cloning of SR-BI, a CD36-related Class B Scavenger Receptor," *J. Biol. Chem.* 269(33): 21003-21009 (1994).

ACTON, et al., "The Collagenous Domains of Macrophage Scavenger Receptors and Complement Component C1q Mediate Their Similar, But Not Identical, Binding Specificities for Polyanionic Ligands," *J. Biol. Chem.* 268: 3530-3537 (1993).

ACTON, et al., "Identification of scavenger receptor SR-BI as a high density lipoprotein receptor," *Science* 271: 518-520 (1996).

AGRAWAL, et al., "Oligodeoxynucleoside phosphoramidates and phosphorothioates as inhibitors of human immunodeficiency virus," *Proc. Natl. Acad. Sci. USA*, 85:7079-7083 (1988).

ANDERSEN and DIETSCHY, "Kinetic parameters of the lipoprotein transport systems in the adrenal gland of the rat determined in vivo. Comparison of low and high density lipoproteins of human and rat origin," *J. Biol. Chem.* 256: 7362 (1981).

ARAI, et al., "Multiple Receptors for Modified Low Density Lipoproteins in Mouse Peritoneal Macrophages: Different Uptake Mechanisms for Acetylated and Oxidized Low Density Lipoproteins," *Biochem. Biophys. Res. Commun* 159:1375-1382 (1989).

ASCH, et al., "Isolation of the Thrombospondin Membrane Receptor," *J. Clin. Invest.* 79:1054-1061 (1987).

ASKEW, et al., "Molecular Recognition with Convergent Functional Groups, Synthetic and Structural Studies with a Model Receptor for Nucleic Acid Components", *J. Am. Chem. Soc.* 111: 1082-1090 (1989).

AZHAR, et al. "Uptake and utilization of lipoprotein cholesteryl esters by rat granulosa cells," *Biochim. Biophys. Acta* 1047, 148-169 (1990).

BAJETTA, et al., "Endocrinological and clinical evaluation of two doses of formestane in advanced breast cancer," *Br. J. Cancer* 70: 145-150 (1994).

BALDINI, et al., "Cloning of a Rab3 Isotype Predominately Expressed in Adipocytes", *Proc. Natl. Acad. Sci. U.S.A.* 89: 5049-5052 (1992).

BICKEL, et al., "Rabbit Aortic Smooth Muscle Cells Express Inducible Macrophage Scavenger Receptor Messenger RNA that is Absent from Endothelial Cells", *J. Clin. Invest.* 90: 1450-1457 (1992).

BLUME, et al., "Triple Helix Formation by Purine-rich Oligonucleotides Targeted to the Human Dihydrofolate Reductase Promoter", *Nucl. Acids Res.* 20: 1777-1784 (1992).

BORK, et al., "Go hunting in sequence databases but watch out for the traps," *Trends in Genetics* 12: 425-427 (1996).

BORK, et al., "Powers and pitfalls in sequence analysis: the 70% hurdle," *Genome Research* 10: 398-400 (2000).

BRENNER, "Errors in genome annotation," *Trends in Genetics* 15: 132-133 (1999).

BROWN & GOLDSTEIN, "Lipoprotein Metabolism In The Macrophage: Implications for Cholesterol Deposition in Atherosclerosis" *Annu. Rev. Biochem.* 52: 223-261 (1983).

CALVO & VEGA, "Identification, Primary Structure, and Distribution of CLA-1, a Novel Member of the CD36/LIMPII Gene Family", *J. Biol. Chem.* 268: 18929:18935 (1993).

CHARRON, et al., "A Glucose Transport Protein Expressed Predominately in Insulin-responsive Tissues", *Proc. Natl. Acad. Sci. U.S.A.* 86: 2535-2539 (1989).

CHUNG, et al., "Single vertical Spin Density Gradient Ultracentrifugation," in Methods of Enzymology, (Segrest, et al. eds.) Academic Press, Inc.: Orlando, vol. 128, pp. 181-209 (1986).

CIRKEL, et al., "Medical treatment of symptomatic endometriosis," *Human Reproduction* 11: 89-101 (1996).

COONEY, et al., "Site-Specific Oligonucleotide Binding Represses Transcription of the Human c-myc Gene in Vitro," *Science* 241: 456-459 (1988).

CROOKE, "Progress Toward Oligonucleotide Therapeutics: Pharmacodynamic Properties", *FASEB J.* 7: 533-539 (1993).

DOERKS, et al., "Protein annotation: detective work for function prediction," *Trends in Genetics* 14: 248-250 (1998).

DOI, et al., "Charged Collagen Struture Mediates the Recognition of Negatively Charged Macromolecules by Macrophage Scavenger Receptors," *J. Biol. Chem.* 268: 2126-2133 (1993).

DUVAL-VALENTIN, et al., "Specific Inhibition of Transcription by Triple Helix-Forming Oligonucleotides," *Proc. Natl. Acad. Sci. USA*, 89: 504-508 (1992).

ENDEMANN, et al. "CD36 Is a Receptor for Oxidized Low Density Lipoprotein", *J. Biol. Chem.* 268: 11811-11816 (1993).

FRASER, et al., "Divalent cation-independent macrophage adhesion inhibited by monoclonal antibody to murine scavenger receptor", *Nature* 364: 343-346 (1993).

FREEMAN, et al., "Expression of type I and type II bovine scavenger receptors in Chinese hamster ovary cells: Lipid droplet accumulation and nonreciprocal cross competition by acetylated and oxidized low density lipoprotein", *Proc. Natl. Acad. Sci. U.S.A.* 88: 4931-4935 (1991).

GLASS, et al., "Dissociation of tissue uptake of cholesterol ester from that of apoprotein A-I of rat plasma high density lipoprotein: selective delivery of cholesterol ester to liver, adrenal, and gonad," *Proc. Natl. Acad. Sci. USA* 80: 5435 (1983).

GLASS, et al., "Uptake of high-density lipoprotein-associated apoprotein A-I and cholesterol esters by 16 tissues of the rat in vivo and by adrenal cells and hepatocytes in vitro," *J. Biol. Chem.* 260: 744 (1985).

GOLDSTEIN, et al., "Binding site on macrophages that mediates uptake and degradation of acetylated low density lipoprotein, producing massive cholesterol deposition", *Proc. Natl. Acad. Sci. U.S.A.* 76: 333-337 (1979).

GREENWALT, et al., "Membrane Glycoprotein CD36: A Review of Its Roles in Adherence, Signal Transduction, and Transfusion Medicine", *Blood* 80:1105-1115 (1992).

GREGORIADIS, Chapter 14: "Liposomes", Drug Carriers in Biology and Medicine Academic Press, pp. 287-341 (1979).

GRIGORIEV, et al., "A Triple Helix-forming Oligonucleotide-Intercalator Conjugate Acts as a Transcriptional Repressor via Inhibition of NF KB Binding to Interleukin-2 Receptor α -Regulatory Sequence", *J. Biol. Chem.* 267: 3389-3395 (1992).

HABERLAND, et al., "Two Distinct Receptors Account for Recognition of Maleyl-Albumin in Human Monocytes during Differentiation In Vitro", *J. Clin. Invest.* 77: 681-689 (1986).

HERZ, et al., "Surface location and high affinity for calcium of a 500-kd liver membrane protein closely related to the LDL-receptor suggest a physiological role as lipoprotein receptor", *EMBO J.* 7: 4119-4127 (1988).

HOGAN, et al., Manipulating the mouse embryo, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY (1986).

HOLT, et al., "An Oligomer Complementary to c-myc mRNA Inhibits Proliferation of HL-60 Promyelocytic Cells and Induces Differentiation", *Mol. Cell. Biol.* 8: 963-973 (1988).

HORIUCHI, et al., "Scavenger Function of Sinusoidal Liver Cells: Acetylated Low-density Lipoprotein is Endocytosed via a Route Distinct from Formaldehyde-treated Serum Albumin", *J. Biol. Chem.* 259: 53-56 (1985).

HUANG, et al., "Membrane glycoprotein IV (CD36) is physically associated with the Fyn, Ltn, and Yes protein-tyrosine kinases in human platelets", *Proc. Natl. Acad. Sci. USA* 88: 7844-7848 (1991).

HUNT & CALDERWOOD, "Characterization and sequence of a mouse hsp70 gene and its expression in mouse cell lines", *Gene* 87: 199-204 (1990).

ITAKURA, et al., "Synthesis and use of synthetic oligonucleotides", in *Ann. Rev. Biochem.* 53: 323-356 (1984).

JOYNER et al., "Production of a mutation in mouse En-2 gene by homologous recombination in embryonic stem cells," *Nature* 338: 153-156 (1989).

KHOO, et al., "Selective uptake of HDL cholesteryl esters is active in transgenic mice expressing human apolipoprotein A-I," *J. Lipid Res.* 36: 593 (1995).

KODAMA et al, "Type I macrophage scavenger receptor contains α -helical and collagen-like coiled coils" *Nature* 343: 531-535 (1990).

KOFF, et al., "Formation and activation of a cyclin E-cdk2 complex during the G1 phase of the human cell cycle," *Science* 257: 1689-1694 (1992).

KOWAL & FIELDLER, "Adrenal cells in tissue culture. I. Assay of steroid products; steroidogenic responses to peptide hormones," *Arch. Biochem. Biophys.* 128: 406-421(1968).

KOWAL, "Adrenal cells in tissue culture. IV. Use of an inhibitor of steroid synthesis for the study of ACTH action," *Endocrinology* 85: 270-279 (1969).

KRIEGER & HERZ, "Structures and Functions of Multiligand Lipoprotein Receptors: Macrophage Scavenger Receptors and LDL Receptor-Related Protein (LRP)", *Annu. Rev. Biochem.* 63: 601-637 (1994).

KRIEGER, "Complementation of Mutations in the LDL Pathway of Receptor-Mediated Endocytosis by Cocultivation of LDL Receptor-Defective Hamster Cell Mutants", *Cell* 33: 413-422 (1983).

KRIEGER, "Molecular flypaper and atherosclerosis: structure of the macrophage scavenger receptor", *Trends Biochem. Sci.* 17:141-146 (1992).

LANDSCHULZ, et al., "Regulation of scavenger receptor, class B, type I, a high density lipoprotein receptor, in liver and steroidogenic tissues of the rat," *J Clin Invest.* 98(4):984-95 (1996).

LEWIS & DEAN, "Automated site-directed drug design: the formation of molecular templates in primary structure generation", *Proc. R. Soc. Lond.*, 236:125-140 and 141-162 (1989).

LOVELL-BADGE, in Teratocarcinomas and embryonic stem cells, a practical approach (Robertson, ed.) IRL Press (1987).

LOWRY, et al. "Protein Measurement with the Folin Phenol Reagent", *J. Biol. Chem.* 193: 265-275 (1951).

MAHER, et al., "Inhibition of DNA Binding Proteins by Oligonucleotide-Directed Triple Helix Formation", *Science* 245:725-730 (1989).

MCKINLAY & ROSSMANN, "Rational design of antiviral agents", *Annu. Rev. Pharmacol. Toxicol.* 29:111-122 (1989).

MERRIFIELD, "Solid Phase Peptide Synthesis. I. The Synthesis of a Tetrapeptide", *J. Am. Chem. Soc.* 85: 2149-2154 (1963).

MIETTINEN, et al., "Abnormal lipoprotein metabolism and reversible female infertility in HDL receptor (SR-BI)-deficient mice," *J Clinical Invest.* 108: 1717-1722 (2001).

MOESTRUP, et al., "Distribution of the α 2-macroglobulin receptor/low density lipoprotein receptor-related protein in human tissues", *Cell Tissue Res.* 269: 375-382 (1992).

MULLIGAN, "The Basic Science of Gene Therapy", *Science* 260: 926-932 (1993).

NAGELKERKE, et al., "In Vivo and in Vitro Uptake and Degradation of Acetylated Low Density Lipoprotein by Rat Liver Endothelial, Kupffer, and Parenchymal Cells", *J. Biol. Chem.* 258: 12221-12227 (1983).

NAITO, et al., "Tissue Distribution, Intracellular Localization, and In Vitro Expression of Bovine Macrophage Scavenger Receptors", *Am. J. Pathol* 139: 1411-1423 (1991).

NARANG, et al., in "Chemical Synthesis of Deoxyoligonucleotides by the Modified Triester Method", *Methods Enzymol* 65: 610-620 (1980).

OCKENHOUSE, et al., "Activation of Monocytes and Platelets by Monoclonal Antibodies or Malaria-infected Erythrocytes Binding to the CD36 Surface Receptor in vitro", *J. Clin. Invest.* 84: 468-475 (1989).

OFFENSPERGER, et al., "In vivo inhibition of duck hepatitis B virus replication and gene expression by phosphorothioate modified antisense oligodeoxynucleotides", *EMBO J.* 12: 1257-1262 (1993)

OQUENDO, et al., "CD36 Directly Mediates Cytoadherence of Plasmodium falciparum Parasitized Erythrocytes", *Cell* 58: 95-101 (1989)

ORSON, et al., "Oligonucleotide inhibition of IL2R α mRNA transcription by promoter region collinear triplex formation in lymphocytes", *Nucl. Acids Res.* 19: 3435-3441 (1991).

OTTNAD, et al., "Differentiation of binding sites on reconstituted hepatic scavenger receptors using oxidized low-density lipoprotein", *Biochem J.* 281: 745-751 (1992).

PERRY & DAVIES, "The Use of 3D Modelling Databases for Identifying Structure Activity Relationships", *QSAR: Quantitative Structure-Activity Relationships in Drug Design*, pp. 189-193 (Alan R. Liss, Inc. 1989).

PIETERS, et al., "In Vitro and In Vivo Evidence for the Role of HDL in reverse Cholesterol Transport," *Biochim. Biophys. Acta* 1225: 125 (1994).

PITAS, et al., "Acetoacetylated lipoproteins used to distinguish fibroblasts from macrophages in vitro by fluorescence microscopy," *Arteriosclerosis* 1: 177 (1981).

POSTEL, et al., "Evidence that a triplex-forming oligodeoxyribonucleotide binds to the c-myc promoter in HeLa cells, thereby reducing c-myc mRNA levels", *Proc. Natl. Acad. Sci. USA* 88:8227-8231 (1991).

POTTER et al "Enhancer-dependent expression of human kappa immunoglobulin genes introduced into mouse pre-B lymphocytes by electroporation," *Proc. Natl. Acad. Sci. USA* 81: 7161 (1984).

REAVEN, et al. "Cholesterol uptake by the 'selective' pathway of ovarian granulosa cells: early intracellular events," *J. Lipid Res.* 36(7):1602-1617 (1995).

RIGOTTI, et al. "Scavenger receptor BI- a cell surface receptor for high density lipoprotein," *Curr. Opin. Lipidol.* 8: 181-188 (1997).

RIGOTTI, et al., "Regulation by adrenocorticotrophic hormone of the in vivo expression of scavenger receptor class B type I (SR-BI), a high density lipoprotein receptor, in steroidogenic cells of the murine adrenal gland," *J Biol Chem.* 271(52):33545-9 (1996).

RIGOTTI, et al., "The Class B Scavenger Receptors SR-BI and CD36 Are Receptors for Anionic Phospholipids" *J. Biol. Chem.* 270(27):16221-16224 (1995).

RIPKA, "Computers picture the perfect drug", *New Scientist* 54-57 (1988).

ROHRER, et al., "Coiled-coil fibrous domains mediate ligand binding by macrophage scavenger receptor type II", *Nature* 343: 570-572 (1990).

ROUSH, "Antisense aims for a renaissance," *Science* 276: 1192-1193 (1997).

ROUVINEN, et al., "Computer-aided Drug Design", *Acta Pharmaceutica Fennica*, 97:159-166 (1988).

SAMMETT and TALL, "Mechanisms of enhancement of cholesteryl ester transfer protein activity by lipolysis," *J. Biol. Chem.* 260: 6687 (1985).

SARIN, et al., "Inhibition of acquired immunodeficiency syndrome virus by oligodeoxynucleoside methylphosphonates", *Proc. Natl. Acad. Sci. USA* 85: 7448-7451 (1989).

SAVILL, et al., "Macrophage Vitronectin Receptor, CD36, and Thrombospondin Cooperate in Recognition of Neutrophils Undergoing Programmed Cell Death", *Chest* 99: 6S-7S (suppl) (1991).

SCHNITZER, et al. "Preferential Interaction of Albumin-binding Proteins, gp30 and gp18, with Conformationally Modified Albumins", *J. Biol. Chem.* 267:24544-24553 (1992).

SCRIVER, et al., ed., The Metabolic and Molecular Bases of Inherited Disease
McGraw-Hill: New York, pp. 1981-2030 (1995).

SHAW, et al., "Modified deoxyoligonucleotides stable to exonuclease degradation in serum," *Nucleic Acids Res.*, 19:747-750 (1991).

SKOLNICK, et al., "From genes to protein structure and function: novel applications of computational approaches in the genomic era," *Trends in Biotech.* 18: 34-39 (2000).

SMITH and JOHNSON "Single-step purification of polypeptides expressed in *Escherichia coli* as fusions with glutathione S-transferase,' *Gene* 67: 31-40 (1988).

SMITH, et al., "The challenges of genome sequence annotation or 'the devil is in the details,'" *Nature Biotechnology* 15:1222-1223 (1997).

SOUTHERN and BERG, "Transformation of mammalian cells to antibiotic resistance with a bacterial gene under control of the SV40 early region promoter," *J. Mol. Appl. Gen.* 1: 327-341 (1982).

SPARROW, et al., "A Macrophage Receptor That Recognizes Oxidized Low Density Lipoprotein but Not Acetylated Low Density Lipoprotein", *J. Biol. Chem.* 264:2599-2604 (1989).

SPONA, et al., "Inhibition of Ovulation by an oral contraceptive containing 100 µg levonorgestrel in combination with 20 µg ethinylestradiol," *Contraception* 54: 299-304 (1996).

STANTON, et al., "A Macrophage Fe Receptor for IgG Is Also a Receptor for Oxidized Low Density Lipoprotein," *J. Biol. Chem.* 267: 22446-22451 (1992).

STEIN, et al., "Metabolism of HDL-cholesteryl ester in the rat, studied with a nonhydrolyzable analog, cholesteryl linoleyl ether," *Biochim. Biophys. Acta*, 752: 98 (1983).

STEINBERG, et al., "BEYOND CHOLESTEROL: Modifications of Low-Density Lipoprotein That Increase Its Atherogenicity", *N. Engl. J. Med.* 320: 915-924 (1989).

STENT, et al., MOLECULAR GENETICS, pp. 213-219 (1971).

SZOSTAK, "In Vitro genetics," *TIBS* 19: 89, (1992).

TANDON, et al., "Identification of Glycoprotein IV (CD36) as a Primary Receptor for Platelet-Collagen Adhesion", *J. Biol. Chem.* 264:7576-7583 (1989).

TEMEL, et al., "Scavenger receptor class B, type I (SR-BI) is the major route for the delivery of high density lipoprotein cholesterol to the steroidogenic pathway in cultured mouse adrenocortical cells," *Proc Natl Acad Sci U S A.* 94(25):13600-5 (1997).

VIA, et al., "Identification and density dependant regulation of the AC-LDL Receptor in normal and transformed bovine aortic endothelial cells (BAEC)", *FASEB J.* 6: A371, #2135 (1992).

WHITCROFT, et al., "Hormone replacement therapy: risks and benefits," *Clinical Endocrinology* 36: 15-20 (1992).

WICKSTROM, et al., "Human promyelocytic leukemia HL-60 cell proliferation and c-myc protein expression are inhibited by an antisense pentadecadeoxynucleotide targeted against c-myc mRNA", *Proc. Natl. Acad. Sci. USA* 85:1028-1032 (1988).

YOUNG, et al., "Triple helix formation inhibits transcription elongation in vitro," *Proc. Natl. Acad. Sci. USA*, 88: 10023-10026 (1991).

ZAMECNIK, et al., "Inhibition of Rous sarcoma virus replication and cell transformation by a specific oligodeoxynucleotide", *Proc. Natl. Acad. Sci. USA* 75: 280-284 (1978).

ZAMECNIK, et al., "Inhibition of replication and expression of human T-cell lymphotropic virus type III in cultured cells by exogenous sythenic oligonucleotides complementary to viral RNA", *Proc. Natl. Acad. Sci.* 83: 4143-4146 (1986).


ZHU, et al., "Systemic Gene Expression After Intravenous DNA Delivery into Adult Mice," *Science* 261: 209-211 (1993).

ZIMMER and GRUSS, "Production of chimaeric mice containing embryonic stem (ES) cells carrying a homoeobox Hox 1.1 allele mutated by homologous recombination," *Nature* 338: 150-153 (1989).

Remarks

This statement should not be interpreted as a representation that an exhaustive search has been conducted or that no better art exists. Moreover, Applicant invites the Examiner to make an independent evaluation of the cited art to determine its relevance to the subject matter of the present application. Applicant is of the opinion that his claims patentably distinguish over the art referred to herein, either alone or in combination.

Respectfully submitted,



Patrea L. Pabst
Reg. No. 31,284

Dated: November 12, 2003

HOLLAND & KNIGHT LLP
One Atlantic Center
1201 West Peachtree Street, N.E.
Suite 2000
Atlanta, Georgia 30309-3400
404-817-8473
FAX 404-817-8588
www.hklaw.com

1340194_v1



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | | | | | |
|--|---|----|----|--------------------------|--------------|----------------------------|--|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | | | Complete if Known | | | |
| | | | | Application Number | | Continuation of 09/148,012 | |
| | | | | Filing Date | | November 12, 2003 | |
| | | | | First Named Inventor | | Monty Krieger | |
| | | | | Group Art Unit | | | |
| Examiner Name | | | | | | | |
| Sheet | 1 | of | 12 | Attorney Docket Number | MIT 8299 CON | | |

| U.S. PATENT DOCUMENTS | | | | | | |
|-----------------------|-----------------------|--------------------|--------------------------------------|---|--------------------------------------|---|
| Examiner Initials* | Cite No. ¹ | US Patent Document | | Name of Patentee or Applicant of Cited Document | Date of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number | Kind Code ² (if known) | | | |
| | | 3,625,214 | | Higuchi | 12-07-1971 | |
| | | 4,244,946 | | River, et al. | 01-13-1981 | |
| | | 4,305,872 | | Johnston, et al. | 12-15-1981 | |
| | | 4,316,891 | | Guillemin, et al. | 12-23-1982 | |
| | | 4,629,784 | | Stammer | 12-16-1986 | |
| | | 4,789,734 | | Pierschbacher | 12-06-1988 | |
| | | 4,792,525 | | Ruoslaghti, et al. | 12-20-1988 | |
| | | 4,868,116 | | Morgan, et al. | 09-19-1989 | |
| | | 4,906,474 | | Langer, et al. | 03-06-1990 | |
| | | 4,925,673 | | Steiner, et al. | 05-15-1990 | |
| | | 4,980,286 | | Morgan, et al. | 12-25-1990 | |
| | | 5,674,488 | | Reich | 10-07-1997 | |
| | | 5,962,322 | | Kozarsky, et al. | 10-05-1999 | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| FOREIGN PATENT DOCUMENTS | | | | | | | | |
|--------------------------|-----------------------|-------------------------|---------------------|-----------------------------------|---|--|---|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | | | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | | Office. ³ | Number ⁴ | Kind Code ⁵ (if known) | | | | |
| | | PCT | WO 93/01286 | | Massachusetts Institute of Technology | 01-21-1993 | | |
| | | PCT | WO 96/00288 | | Rigotti, et al. | 01-04-1996 | | |
| | | PCT | WO 97/18304 | | Massachusetts Institute of Technology | 05-22-1997 | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| | | | |
|-------------------|--|-----------------|--|
| Examine Signature | | Date Considered | |
|-------------------|--|-----------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SENT TO: Assistant Commission for Patent, Washington, DC 20231.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | | | |
|--|---|--------------------------|----------------------------|------------------------|--------------|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Complete if Known | | | |
| | | Application Number | Continuation of 09/148,012 | | |
| | | Filing Date | November 12, 2003 | | |
| | | First Named Inventor | Monty Krieger | | |
| | | Group Art Unit | | | |
| | | Examiner Name | | | |
| Sheet | 2 | of | 12 | Attorney Docket Number | MIT 8299 CON |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| | | ABUMRAD, et al., "Cloning of a Rat Adipocyte Membrane Protein Implicated in Binding or Transport of Long-chain Fatty Acids That Is Induced during Preadipocyte Differentiation," <i>J. Biol. Chem.</i> 268:17665-17668 (1993). | |
| | | ACTON, et al., "Expression Cloning of SR-BI, a CD36-related Class B Scavenger Receptor," <i>J. Biol. Chem.</i> 269(33): 21003-21009 (1994). | |
| | | ACTON, et al., "The Collagenous Domains of Macrophage Scavenger Receptors and Complement Component C1q Mediate Their Similar, But Not Identical, Binding Specificities for Polyanionic Ligands," <i>J. Biol. Chem.</i> 268: 3530-3537 (1993). | |
| | | ACTON, et al., "Identification of scavenger receptor SR-BI as a high density lipoprotein receptor," <i>Science</i> 271: 518-520 (1996). | |
| | | AGRAWAL, et al., "Oligodeoxynucleoside phosphoramidates and phosphorothioates as inhibitors of human immunodeficiency virus," <i>Proc. Natl. Acad. Sci. USA</i> , 85:7079-7083 (1988). | |
| | | ANDERSEN and DIETSCHY, "Kinetic parameters of the lipoprotein transport systems in the adrenal gland of the rat determined in vivo. Comparison of low and high density lipoproteins of human and rat origin," <i>J. Biol. Chem.</i> 256: 7362 (1981). | |
| | | ARAI, et al., "Multiple Receptors for Modified Low Density Lipoproteins in Mouse Peritoneal Macrophages: Different Uptake Mechanisms for Acetylated and Oxidized Low Density Lipoproteins," <i>Biochem. Biophys. Res. Commun.</i> 159:1375-1382 (1989). | |
| | | ASCH, et al., "Isolation of the Thrombospondin Membrane Receptor," <i>J. Clin. Invest.</i> 79:1054-1061 (1987). | |
| | | ASKEW, et al., "Molecular Recognition with Convergent Functional Groups, Synthetic and Structural Studies with a Model Receptor for Nucleic Acid Components", <i>J. Am. Chem. Soc.</i> 111: 1082-1090 (1989). | |
| | | AZHAR, et al. "Uptake and utilization of lipoprotein cholesteryl esters by rat granulosa cells," <i>Biochim. Biophys. Acta</i> 1047, 148-169 (1990). | |

| | | | |
|----------------------|--|-----------------|--|
| Examiner's Signature | | Date Considered | |
|----------------------|--|-----------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | | | |
|--|---|--------------------------|----------------------------|------------------------|--------------|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Complete if Known | | | |
| | | Application Number | Continuation of 09/148,012 | | |
| | | Filing Date | November 12, 2003 | | |
| | | First Named Inventor | Monty Krieger | | |
| | | Group Art Unit | | | |
| | | Examiner Name | | | |
| Sheet | 3 | of | 12 | Attorney Docket Number | MIT 8299 CON |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| | | BAJETTA, et al., "Endocrinological and clinical evaluation of two doses of formestane in advanced breast cancer," <i>Br. J. Cancer</i> 70: 145-150 (1994). | |
| | | BALDINI, et al., "Cloning of a Rab3 Isotype Predominately Expressed in Adipocytes", <i>Proc. Natl. Acad. Sci. U.S.A.</i> 89: 5049-5052 (1992). | |
| | | BICKEL, et al., "Rabbit Aortic Smooth Muscle Cells Express Inducible Macrophage Scavenger Receptor Messenger RNA that is Absent from Endothelial Cells", <i>J. Clin. Invest.</i> 90: 1450-1457 (1992). | |
| | | BLUME, et al., "Triple Helix Formation by Purine-rich Oligonucleotides Targeted to the Human Dihydrofolate Reductase Promoter", <i>Nucl. Acids Res.</i> 20: 1777-1784 (1992). | |
| | | BORK, et al., "Go hunting in sequence databases but watch out for the traps," <i>Trends in Genetics</i> 12: 425-427 (1996). | |
| | | BORK, et al., "Powers and pitfalls in sequence analysis: the 70% hurdle," <i>Genome Research</i> 10: 398-400 (2000). | |
| | | BRENNER, "Errors in genome annotation," <i>Trends in Genetics</i> 15: 132-133 (1999). | |
| | | BROWN & GOLDSTEIN, "Lipoprotein Metabolism In The Macrophage: Implications for Cholesterol Deposition in Atherosclerosis" <i>Annu. Rev. Biochem.</i> 52: 223-261 (1983). | |
| | | CALVO & VEGA, "Identification, Primary Structure, and Distribution of CLA-1, a Novel Member of the CD36/LIMPII Gene Family", <i>J. Biol. Chem.</i> 268: 18929-18935 (1993). | |
| | | CHARRON, et al., "A Glucose Transport Protein Expressed Predominately in Insulin-responsive Tissues", <i>Proc. Natl. Acad. Sci. U.S.A.</i> 86: 2535-2539 (1989). | |

| | | | |
|----------------------|--|-----------------|--|
| Examiner's Signature | | Date Considered | |
|----------------------|--|-----------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | | | |
|--|---|----------------------|----------------------------|------------------------|--------------|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Complete if Known | | | |
| | | Application Number | Continuation of 09/148,012 | | |
| | | Filing Date | November 12, 2003 | | |
| | | First Named Inventor | Monty Krieger | | |
| | | Group Art Unit | | | |
| | | Examiner Name | | | |
| Sheet | 4 | of | 12 | Attorney Docket Number | MIT 8299 CON |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| | | CHUNG, et al., "Single vertical Spin Density Gradient Ultracentrifugation," in <i>Methods of Enzymology</i> , (Segrest, et al. eds.) Academic Press, Inc.: Orlando, vol. 128, pp. 181-209 (1986). | |
| | | CIRKEL, et al., "Medical treatment of symptomatic endometriosis," <i>Human Reproduction</i> 11: 89-101 (1996). | |
| | | COONEY, et al., "Site-Specific Oligonucleotide Binding Represses Transcription of the Human c-myc Gene in Vitro," <i>Science</i> 241: 456-459 (1988). | |
| | | CROOKE, "Progress Toward Oligonucleotide Therapeutics: Pharmacodynamic Properties", <i>FASEB J.</i> 7: 533-539 (1993). | |
| | | DOERKS, et al., "Protein annotation: detective work for function prediction," <i>Trends in Genetics</i> 14: 248-250 (1998). | |
| | | DOI, et al., "Charged Collagen Struture Mediates the Recognition of Negatively Charged Macromolecules by Macrophage Scavenger Receptors," <i>J. Biol. Chem.</i> 268: 2126-2133 (1993). | |
| | | DUVAL-VALENTIN, et al., "Specific Inhibition of Transcription by Triple Helix-Forming Oligonucleotides," <i>Proc. Natl. Acad. Sci. USA</i> , 89: 504-508 (1992). | |
| | | ENDEMANN, et al. "CD36 Is a Receptor for Oxidized Low Density Lipoprotein", <i>J. Biol. Chem.</i> 268: 11811-11816 (1993). | |
| | | FRASER, et al., "Divalent cation-independent macrophage adhesion inhibited by monoclonal antibody to murine scavenger receptor", <i>Nature</i> 364: 343-346 (1993). | |
| | | FREEMAN, et al., "Expression of type I and type II bovine scavenger receptors in Chinese hamster ovary cells: Lipid droplet accumulation and nonreciprocal cross competition by acetylated and oxidized low density lipoprotein", <i>Proc. Natl. Acad. Sci. U.S.A.</i> 88: 4931-4935 (1991). | |

| | | | |
|----------------------|--|-----------------|--|
| Examiner's Signature | | Date Considered | |
|----------------------|--|-----------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | | | |
|--|---|--------------------------|----------------------------|------------------------|--------------|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Complete if Known | | | |
| | | Application Number | Continuation of 09/148,012 | | |
| | | Filing Date | November 12, 2003 | | |
| | | First Named Inventor | Monty Krieger | | |
| | | Group Art Unit | | | |
| | | Examiner Name | | | |
| Sheet | 5 | of | 12 | Attorney Docket Number | MIT 8299 CON |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| | | GLASS, et al., "Dissociation of tissue uptake of cholesterol ester from that of apoprotein A-I of rat plasma high density lipoprotein: selective delivery of cholesterol ester to liver, adrenal, and gonad," <i>Proc. Natl. Acad. Sci. USA</i> 80: 5435 (1983). | |
| | | GLASS, et al., "Uptake of high-density lipoprotein-associated apoprotein A-I and cholesterol esters by 16 tissues of the rat in vivo and by adrenal cells and hepatocytes in vitro," <i>J. Biol. Chem.</i> 260: 744 (1985). | |
| | | GOLDSTEIN, et al., "Binding site on macrophages that mediates uptake and degradation of acetylated low density lipoprotein, producing massive cholesterol deposition," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 76: 333-337 (1979). | |
| | | GREENWALT, et al., "Membrane Glycoprotein CD36: A Review of Its Roles in Adherence, Signal Transduction, and Transfusion Medicine", <i>Blood</i> 80:1105-1115 (1992). | |
| | | GREGORIADIS, Chapter 14: "Liposomes", <i>Drug Carriers in Biology and Medicine</i> Academic Press, pp. 287-341 (1979). | |
| | | GRIGORIEV, et al., "A Triple Helix-forming Oligonucleotide-Intercalator Conjugate Acts as a Transcriptional Repressor via Inhibition of NF KB Binding to Interleukin-2 Receptor α -Regulatory Sequence", <i>J. Biol. Chem.</i> 267: 3389-3395 (1992). | |
| | | HABERLAND, et al., "Two Distinct Receptors Account for Recognition of Maleyl-Albumin in Human Monocytes during Differentiation In Vitro", <i>J. Clin. Invest.</i> 77: 681-689 (1986). | |
| | | HERZ, et al., "Surface location and high affinity for calcium of a 500-kd liver membrane protein closely related to the LDL-receptor suggest a physiological role as lipoprotein receptor", <i>EMBO J.</i> 7: 4119-4127 (1988). | |
| | | HOGAN, et al., <i>Manipulating the mouse embryo</i> , Cold Spring Harbor Laboratory, Cold Spring Harbor, NY (1986). | |
| | | HOLT, et al., "An Oligomer Complementary to c-myc mRNA Inhibits Proliferation of HL-60 Promyelocytic Cells and Induces Differentiation", <i>Mol. Cell. Biol.</i> 8: 963-973 (1988). | |

| | | | |
|----------------------|--|-----------------|--|
| Examiner's Signature | | Date Considered | |
|----------------------|--|-----------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | | | |
|--|---|--------------------------|----------------------------|------------------------|--------------|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Complete if Known | | | |
| | | Application Number | Continuation of 09/148,012 | | |
| | | Filing Date | November 12, 2003 | | |
| | | First Named Inventor | Monty Krieger | | |
| | | Group Art Unit | | | |
| | | Examiner Name | | | |
| Sheet | 6 | of | 12 | Attorney Docket Number | MIT 8299 CON |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| | | HORIUCHI, et al., "Scavenger Function of Sinusoidal Liver Cells: Acetylated Low-density Lipoprotein is Endocytosed via a Route Distinct from Formaldehyde-treated Serum Albumin", <i>J. Biol. Chem.</i> 259: 53-56 (1985). | |
| | | HUANG, et al., "Membrane glycoprotein IV (CD36) is physically associated with the Fyn, Ltn, and Yes protein-tyrosine kinases in human platelets," <i>Proc. Natl. Acad. Sci. USA</i> 88: 7844-7848 (1991). | |
| | | HUNT & CALDERWOOD, "Characterization and sequence of a mouse hsp70 gene and its expression in mouse cell lines", <i>Gene</i> 87: 199-204 (1990). | |
| | | ITAKURA, et al., "Synthesis and use of synthetic oligonucleotides", in <i>Ann. Rev. Biochem.</i> 53: 323-356 (1984). | |
| | | JOYNER et al, "Production of a mutation in mouse En-2 gene by homologous recombination in embryonic stem cells," <i>Nature</i> 338: 153-156 (1989). | |
| | | KHOO, et al., "Selective uptake of HDL cholesteryl esters is active in transgenic mice expressing human apolipoprotein A-I," <i>J. Lipid Res.</i> 36: 593 (1995). | |
| | | KODAMA et al, "Type I macrophage scavenger receptor contains α -helical and collagen-like coiled coils" <i>Nature</i> 343: 531-535 (1990). | |
| | | KOFF, et al., "Formation and activation of a cyclin E-cdk2 complex during the G1 phase of the human cell cycle," <i>Science</i> 257: 1689-1694 (1992). | |
| | | KOWAL & FIELDER, "Adrenal cells in tissue culture. I. Assay of steroid products; steroidogenic responses to peptide hormones," <i>Arch. Biochem. Biophys.</i> 128: 406-421(1968). | |
| | | KOWAL, "Adrenal cells in tissue culture. IV. Use of an inhibitor of steroid synthesis for the study of ACTH action," <i>Endocrinology</i> 85: 270-279 (1969). | |

| | |
|----------------------|-----------------|
| Examiner's Signature | Date Considered |
|----------------------|-----------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.





Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | | | |
|--|---|----------------------|----------------------------|------------------------|--------------|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Complete if Known | | | |
| | | Application Number | Continuation of 09/148,012 | | |
| | | Filing Date | November 12, 2003 | | |
| | | First Named Inventor | Monty Krieger | | |
| | | Group Art Unit | | | |
| | | Examiner Name | | | |
| Sheet | 7 | of | 12 | Attorney Docket Number | MIT 8299 CON |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| | | KRIEGER & HERZ, "Structures and Functions of Multiligand Lipoprotein Receptors: Macrophage Scavenger Receptors and LDL Receptor-Related Protein (LRP)", <i>Annu. Rev. Biochem.</i> 63: 601-637 (1994). | |
| | | KRIEGER, "Complementation of Mutations in the LDL Pathway of Receptor-Mediated Endocytosis by Cocultivation of LDL Receptor-Defective Hamster Cell Mutants", <i>Cell</i> 33: 413-422 (1983). | |
| | | KRIEGER, "Molecular flypaper and atherosclerosis: structure of the macrophage scavenger receptor", <i>Trends Biochem. Sci.</i> 17:141-146 (1992). | |
| | | LANDSCHULZ, et al., "Regulation of scavenger receptor, class B, type I, a high density lipoprotein receptor, in liver and steroidogenic tissues of the rat," <i>J Clin Invest.</i> 98(4):984-95 (1996). | |
| | | LEWIS & DEAN, "Automated site-directed drug design: the formation of molecular templates in primary structure generation", <i>Proc. R. Soc. Lond.</i> , 236:125-140 and 141-162 (1989). | |
| | | LOVELL-BADGE, in <i>Teratocarcinomas and embryonic stem cells, a practical approach</i> (Robertson, ed.) IRL Press (1987). | |
| | | LOWRY, et al. "Protein Measurement with the Folin Phenol Reagent", <i>J. Biol. Chem.</i> 193: 265-275 (1951). | |
| | | MAHER, et al., "Inhibition of DNA Binding Proteins by Oligonucleotide-Directed Triple Helix Formation", <i>Science</i> 245:725-730 (1989). | |
| | | MCKINLAY & ROSSMANN, "Rational design of antiviral agents", <i>Annu. Rev. Pharmacol. Toxicol.</i> 29:111-122 (1989). | |
| | | MERRIFIELD, "Solid Phase Peptide Synthesis. I. The Synthesis of a Tetrapeptide", <i>J. Am. Chem. Soc.</i> 85: 2149-2154 (1963). | |

| | | | |
|----------------------|--|-----------------|--|
| Examiner's Signature | | Date Considered | |
|----------------------|--|-----------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | | | |
|--|---|--------------------------|----------------------------|------------------------|--------------|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Complete if Known | | | |
| | | Application Number | Continuation of 09/148,012 | | |
| | | Filing Date | November 12, 2003 | | |
| | | First Named Inventor | Monty Krieger | | |
| | | Group Art Unit | | | |
| | | Examiner Name | | | |
| Sheet | 8 | of | 12 | Attorney Docket Number | MIT 8299 CON |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| | | MIETTINEN, et al., "Abnormal lipoprotein metabolism and reversible female infertility in HDL receptor (SR-BI)-deficient mice," <i>J Clinical Invest.</i> 108: 1717-1722 (2001). | |
| | | MOESTRUP, et al., "Distribution of the α 2-macroglobulin receptor/low density lipoprotein receptor-related protein in human tissues", <i>Cell Tissue Res.</i> 269: 375-382 (1992). | |
| | | MULLIGAN, "The Basic Science of Gene Therapy", <i>Science</i> 260: 926-932 (1993). | |
| | | NAGELKERKE, et al., "In Vivo and in Vitro Uptake and Degradation of Acetylated Low Density Lipoprotein by Rat Liver Endothelial, Kupffer, and Parenchymal Cells", <i>J. Biol. Chem.</i> 258: 12221-12227 (1983). | |
| | | NAITO, et al., "Tissue Distribution, Intracellular Localization, and In Vitro Expression of Bovine Macrophage Scavenger Receptors", <i>Am. J. Pathol</i> 139: 1411-1423 (1991). | |
| | | NARANG, et al., in "Chemical Synthesis of Deoxyoligonucleotides by the Modified Triester Method", <i>Methods Enzymol</i> 65: 610-620 (1980). | |
| | | OCKENHOUSE, et al., "Activation of Monocytes and Platelets by Monoclonal Antibodies or Malaria-infected Erythrocytes Binding to the CD36 Surface Receptor in vitro", <i>J. Clin. Invest.</i> 84: 468-475 (1989). | |
| | | OFFENSBERGER, et al., "In vivo inhibition of duck hepatitis B virus replication and gene expression by phosphorothioate modified antisense oligodeoxynucleotides", <i>EMBO J.</i> 12: 1257-1262 (1993) | |
| | | OQUENDO, et al., "CD36 Directly Mediates Cytoadherence of Plasmodium falciparum Parasitized Erythrocytes", <i>Cell</i> 58: 95-101 (1989) | |
| | | ORSON, et al., "Oligonucleotide inhibition of IL2R α mRNA transcription by promoter region collinear triplex formation in lymphocytes", <i>Nucl. Acids Res.</i> 19: 3435-3441 (1991). | |

| | | | |
|----------------------|--|-----------------|--|
| Examiner's Signature | | Date Considered | |
|----------------------|--|-----------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | | | |
|--|---|--------------------------|----------------------------|------------------------|--------------|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Complete if Known | | | |
| | | Application Number | Continuation of 09/148,012 | | |
| | | Filing Date | November 12, 2003 | | |
| | | First Named Inventor | Monty Krieger | | |
| | | Group Art Unit | | | |
| | | Examiner Name | | | |
| Sheet | 9 | of | 12 | Attorney Docket Number | MIT 8299 CON |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| | | OTTNAD, et al., "Differentiation of binding sites on reconstituted hepatic scavenger receptors using oxidized low-density lipoprotein", <i>Biochem J.</i> 281: 745-751 (1992). | |
| | | PERRY & DAVIES, "The Use of 3D Modelling Databases for Identifying Structure Activity Relationships", QSAR: Quantitative Structure-Activity Relationships in Drug Design, pp. 189-193 (Alan R. Liss, Inc. 1989). | |
| | | PIETERS, et al., "In Vitro and In Vivo Evidence for the Role of HDL in reverse Cholesterol Transport," <i>Biochim. Biophys. Acta</i> 1225: 125 (1994). | |
| | | PITAS, et al., "Acetoacetylated lipoproteins used to distinguish fibroblasts from macrophages in vitro by fluorescence microscopy," <i>Arteriosclerosis</i> 1: 177 (1981). | |
| | | POSTEL, et al., "Evidence that a triplex-forming oligodeoxyribonucleotide binds to the c-myc promoter in HeLa cells, thereby reducing c-myc mRNA levels", <i>Proc. Natl. Acad. Sci. USA</i> 88:8227-8231 (1991). | |
| | | POTTER et al "Enhancer-dependent expression of human kappa immunoglobulin genes introduced into mouse pre-B lymphocytes by electroporation," <i>Proc. Natl. Acad. Sci. USA</i> 81: 7161 (1984). | |
| | | REAVEN, et al. "Cholesterol uptake by the 'selective' pathway of ovarian granulosa cells: early intracellular events," <i>J. Lipid Res.</i> 36(7):1602-1617 (1995). | |
| | | RIGOTTI, et al. "Scavenger receptor BI- a cell surface receptor for high density lipoprotein," <i>Curr. Opin. Lipidol.</i> 8: 181-188 (1997). | |
| | | RIGOTTI, et al., "Regulation by adrenocorticotrophic hormone of the in vivo expression of scavenger receptor class B type I (SR-BI), a high density lipoprotein receptor, in steroidogenic cells of the murine adrenal gland," <i>J Biol Chem.</i> 271(52):33545-9 (1996). | |
| | | RIGOTTI, et al., "The Class B Scavenger Receptors SR-BI and CD36 Are Receptors for Anionic Phospholipids" <i>J. Biol. Chem.</i> 270(27):16221-16224 (1995). | |

| | | | |
|----------------------|--|-----------------|--|
| Examiner's Signature | | Date Considered | |
|----------------------|--|-----------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | | | |
|--|----|--------------------------|----------------------------|------------------------|--------------|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Complete if Known | | | |
| | | Application Number | Continuation of 09/148,012 | | |
| | | Filing Date | November 12, 2003 | | |
| | | First Named Inventor | Monty Krieger | | |
| | | Group Art Unit | | | |
| | | Examiner Name | | | |
| Sheet | 10 | of | 12 | Attorney Docket Number | MIT 8299 CON |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| | | RIPKA, "Computers picture the perfect drug", <i>New Scientist</i> 54-57 (1988). | |
| | | ROHRER, et al., "Coiled-coil fibrous domains mediate ligand binding by macrophage scavenger receptor type II", <i>Nature</i> 343: 570-572 (1990). | |
| | | ROUSH, "Antisense aims for a renaissance," <i>Science</i> 276: 1192-1193 (1997). | |
| | | ROUVINEN, et al., "Computer-aided Drug Design", <i>Acta Pharmaceutica Fennica</i> , 97:159-166 (1988). | |
| | | SAMMETT and TALL, "Mechanisms of enhancement of cholesteryl ester transfer protein activity by lipolysis," <i>J. Biol. Chem.</i> 260: 6687 (1985). | |
| | | SARIN, et al., "Inhibition of acquired immunodeficiency syndrome virus by oligodeoxynucleoside methylphosphonates", <i>Proc. Natl. Acad. Sci. USA</i> 85: 7448-7451 (1989). | |
| | | SAVILL, et al., "Macrophage Vitronectin Receptor, CD36, and Thrombospondin Cooperate in Recognition of Neutrophils Undergoing Programmed Cell Death", <i>Chest</i> 99: 6S-7S (suppl) (1991). | |
| | | SCHNITZER, et al. "Preferential Interaction of Albumin-binding Proteins, gp30 and gp18, with Conformationally Modified Albumins", <i>J. Biol. Chem.</i> 267:24544-24553 (1992). | |
| | | SCRIVER, et al., ed., <i>The Metabolic and Molecular Bases of Inherited Disease</i> . McGraw-Hill: New York, pp. 1981-2030 (1995). | |
| | | SHAW, et al., "Modified deoxyoligonucleotides stable to exonuclease degradation in serum," <i>Nucleic Acids Res.</i> , 19:747-750 (1991). | |

| | |
|----------------------|-----------------|
| Examiner's Signature | Date Considered |
|----------------------|-----------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | |
|--|------------------------|----------------------|----------------------------|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Complete if Known | |
| | | Application Number | Continuation of 09/148,012 |
| | | Filing Date | November 12, 2003 |
| | | First Named Inventor | Monty Krieger |
| | | Group Art Unit | |
| | | Examiner Name | |
| Sheet 11 of 12 | Attorney Docket Number | MIT 8299 CON | |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| | | SKOLNICK, et al., "From genes to protein structure and function: novel applications of computational approaches in the genomic era," <i>Trends in Biotech.</i> 18: 34-39 (2000). | |
| | | SMITH and JOHNSON "Single-step purification of polypeptides expressed in Escherichia coli as fusions with glutathione S-transferase," <i>Gene</i> 67: 31-40 (1988). | |
| | | SMITH, et al., "The challenges of genome sequence annotation or 'the devil is in the details,'" <i>Nature Biotechnology</i> 15:1222-1223 (1997). | |
| | | SOUTHERN and BERG, "Transformation of mammalian cells to antibiotic resistance with a bacterial gene under control of the SV40 early region promoter," <i>J. Mol. Appl. Gen.</i> 1: 327-341 (1982). | |
| | | SPARROW, et al., "A Macrophage Receptor That Recognizes Oxidized Low Density Lipoprotein but Not Acetylated Low Density Lipoprotein," <i>J. Biol. Chem.</i> 264:2599-2604 (1989). | |
| | | SPONA, et al., "Inhibition of Ovulation by an oral contraceptive containing 100 µg levonorgestrel in combination with 20 µg ethinylestradiol," <i>Contraception</i> 54: 299-304 (1996). | |
| | | STANTON, et al., "A Macrophage Fe Receptor for IgG Is Also a Receptor for Oxidized Low Density Lipoprotein," <i>J. Biol. Chem.</i> 267: 22446-22451 (1992). | |
| | | STEIN, et al., "Metabolism of HDL-cholesteryl ester in the rat, studied with a nonhydrolyzable analog, cholesteryl linoleyl ether," <i>Biochim. Biophys. Acta</i> , 752: 98 (1983). | |
| | | STEINBERG, et al., "BEYOND CHOLESTEROL: Modifications of Low-Density Lipoprotein That Increase Its Atherogenicity", <i>N. Engl. J. Med.</i> 320: 915-924 (1989). | |
| | | STENT, et al., <u>MOLECULAR GENETICS</u> , pp. 213-219 (1971). | |

| | | | |
|----------------------|--|-----------------|--|
| Examiner's Signature | | Date Considered | |
|----------------------|--|-----------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | | | |
|--|----|--------------------------|----------------------------|------------------------|--------------|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Complete if Known | | | |
| | | Application Number | Continuation of 09/148,012 | | |
| | | Filing Date | November 12, 2003 | | |
| | | First Named Inventor | Monty Krieger | | |
| | | Group Art Unit | | | |
| | | Examiner Name | | | |
| Sheet | 12 | of | 12 | Attorney Docket Number | MIT 8299 CON |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| | | SZOSTAK, "In Vitro genetics," <i>7TBS</i> 19: 89, (1992). | |
| | | TANDON, et al., "Identification of Glycoprotein IV (CD36) as a Primary Receptor for Platelet-Collagen Adhesion", <i>J. Biol. Chem.</i> 264:7576-7583 (1989). | |
| | | TEMEL, et al., "Scavenger receptor class B, type I (SR-BI) is the major route for the delivery of high density lipoprotein cholesterol to the steroidogenic pathway in cultured mouse adrenocortical cells," <i>Proc Natl Acad Sci U S A.</i> 94(25):13600-5 (1997). | |
| | | VIA, et al., "Identification and density dependant regulation of the AC-LDL Receptor in normal and transformed bovine aortic endothelial cells (BAEC)", <i>FASEB J.</i> 6: A371, #2135 (1992). | |
| | | WHITCROFT, et al., "Hormone replacement therapy: risks and benefits," <i>Clinical Endocrinology</i> 36: 15-20 (1992). | |
| | | WICKSTROM, et al., "Human promyelocytic leukemia HL-60 cell proliferation and c-myc protein expression are inhibited by an antisense pentadecadeoxynucleotide targeted against c-myc mRNA", <i>Proc. Natl. Acad. Sci. USA</i> 85:1028-1032 (1988). | |
| | | YOUNG, et al., "Triple helix formation inhibits transcription elongation in vitro," <i>Proc. Natl. Acad. Sci. USA</i> , 88: 10023-10026 (1991). | |
| | | ZAMECNIK, et al., "Inhibition of Rous sarcoma virus replication and cell transformation by a specific oligodeoxynucleotide", <i>Proc. Natl. Acad. Sci. USA</i> 75: 280-284 (1978). | |
| | | ZAMECNIK, et al., "Inhibition of replication and expression of human T-cell lymphotropic virus type III in cultured cells by exogenous sythetic oligonucleotides complementary to viral RNA", <i>Proc. Natl. Acad. Sci.</i> 83: 4143-4146 (1986). | |
| | | ZHU, et al., "Systemic Gene Expression After Intravenous DNA Delivery into Adult Mice," <i>Science</i> 261: 209-211 (1993). | |
| | | ZIMMER and GRUSS, "Production of chimaeric mice containing embryonic stem (ES) cells carrying a homoeobox Hox 1.1 allele mutated by homologous recombination," <i>Nature</i> 338: 150-153 (1989). | |

| | |
|----------------------|-----------------|
| Examiner's Signature | Date Considered |
|----------------------|-----------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.